REMARKS

The applicants have received and reviewed the Office Action mailed March 10, 2004, Paper No. 5. The applicants originally submitted claims 1-29 in this application. By the present Response and Amendment, the applicants have amended claims 1 and 23-26, and canceled claim 2. Thus, claims 1 and 3-29 remain pending in this application. The applicants have not introduced any new matter.

The Examiner objected to claims 24 to 26 because of informalities relating to claim dependency. The applicants have amended claims 24, 25 and 26 by changing their respective dependencies to claim 23. In view of these amendments, the applicants respectfully submit that the objections have been overcome. Accordingly, the applicants respectfully request that the Examiner withdraw the objection.

The Examiner rejected claims 1-16, 18-28, and 29 under 35 U.S.C. §102(b) as being anticipated by Okanoue et al. (US Patent No. 5,883,890). The applicants respectfully traverse the rejection in view of the foregoing amendments and the remarks set forth below.

The applicants have amended independent claim 1 to include the subject matter of claim 4, and canceled claim 4. Also, the applicants have amended independent claim 23 to include a portion of the subject matter of claim 25, and amended claim 25 to reflect the claim 25 amendment. Nothing in the cited art teaches or discloses the applicants' invention as recited in the claims, as amended.

The applicants' invention as recited in the claims is directed to an apparatus and method for interrogating bits of a data frame. The apparatus includes first logic and/or software (3) that selects a bit pattern from the data frame, second logic (10) that compares a comparison bit value to the selected bit pattern to obtain a comparison result, and third logic (11) that determines a location to where the comparison result is to be routed. Advantageously, the second first logic is reconfigurable to allow the comparison bit value to be varied. Also, the third logic is reconfigurable to allow the location to which the

comparison result is routed to be varied, and the first logic is configurable to allow the bit pattern being located in and selected from the data frame to be varied. See, e.g., the applicants' specification at page 5, lines 23-25. The configurability of the second logic is advantageous for a number of reasons, e.g., its configurability allows multiple communications protocols to be supported by a single hardware configuration. See, e.g., the applicants' specification at page 6, lines 16-22; page 8, lines 6-9; and page 2, lines 13-16.

Okanoue et al. disclose a communications system for transmitting packets of data among mobile terminals. The system includes routers that compares addresses (both inherent addresses and positional addresses) in the data packets of source and destination terminals. The system also includes auxiliary networks with servers that manage the network databases. The server includes an analyzer/reconfigurator 503 (see Fig. 10) for comparing addresses in the header information of the data packets. As discussed in col. 20, lines 2+, the analyzer/reconfigurator performs comparisons of various addresses in the headers of packet data received by the analyzer/reconfigurator and, based on the results, reconfigures the received packet according to the algorithm detailed at col. 20, lines 19+.

Nothing in Okanoue et al. teaches or suggests the applicants' invention as recited in the claims, as amended. The applicants have amended independent claim 1 to include the subject matter of claim 4. More specifically, the applicants have amended claim 1 to clarify that the second logic is reconfigurable to allow the comparison bit value to be altered. As discussed previously herein, such reconfigurability is advantageous because it provides the applicants' apparatus the flexibility to support multiple communications protocols with a single hardware configuration. The applicants have amended independent claim 23 similarly.

In Okanoue et al., the analyzer/reconfigurator 503 compares two header portions of a data packet and, based on the comparison, reconfigures the data packet according to a predetermined algorithm. The analyzer/reconfigurator, by reconfiguring the header portion of the data packet, provides for the data packet to be redirected over an auxiliary network,

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thus improving the efficiency of the overall communication system. However, nothing in Okanoue et al. teaches or suggests reconfiguring the comparison device itself, i.e., reconfiguring the analyzer/reconfigurator.

Furthermore, there is no reason in Okanoue et al. to reconfigure the comparison device. Okanoue et al. are focused on routing data packets over a communications system more efficiently using a plurality of auxiliary networks. Such data routing is achieved by reconfiguring the header information of the data packets. Okanoue et al. are not concerned about hardware flexibility to support multiple communications protocols. Thus, Okanoue et al. offer no reason to have or suggest a reconfigurable comparison device.

The applicants' invention, as recited in the amended claims, has a reconfigurable comparison device (i.e., second logic) that allows the bit comparison value to be varied. The comparison device allows the apparatus to interrogate data from multiple communication protocols, e.g., as discussed previously. In Okanoue et al., the system has an analyzer/reconfigurator that compares two header portions of the same data packet, and reconfigures that data packet (not the comparison device) based on the results of the comparison.

Clearly, the subject matter disclosed in Okanoue et al. does not teach or suggest the applicants' invention as recited in the claims as amended. Okanoue et al. compares two portions of data and reconfigures the data based on the comparison result. Such does not suggest the applicants' invention, which compares a bit pattern in a data frame with a (reconfigurable) logic configuration that is part of the overall apparatus. As mentioned hereinabove, the applicants have amended independent claims 1 and 23 to clarify this distinction. Thus, claims 1 and 23, as amended, are believed to be allowable over the cited art.

Claims 2-16 and 18-22, all of which depend directly or indirectly from independent claim 1, incorporate all of the features of amended claim 1 and thus are believed to be allowable at least for that reason. Moreover, claims 2-16 and 18-22 recite other features that, when combined with the subject matter of amended claim 1, are not shown in the art

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of record. Similarly, claims 24-29, which depend directly or indirectly from independent claim 23, incorporate all of the features of amended claim 23 and thus are believed to be allowable at least for that reason. However, claims 24-29 recite other features that, when combined with the subject matter of amended claim 23, are not shown in the art of record.
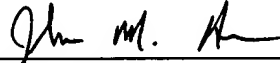
The Examiner indicated that claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The applicants thank the Examiner for noting the allowable subject matter. However, claim 17 depends indirectly from claim 1 and thus incorporates all of the features of claim 1. As just discussed, claim 1, as amended, is neither taught nor suggested by the cited art. Accordingly, claim 17 is allowable at least because it depends from claim 1. Moreover, claim 17 recites other features that, when combined with the subject matter of claim 1, are not shown in the cited art.

In view of the amendments discussed hereinabove, the applicants respectfully request that the Examiner withdraw the rejection of claims 1-16, 18-28, and 29 under 35 U.S.C. §102(b).

CONCLUSION

In view of the amendments submitted herein and the above comments, the applicants respectfully submit that all grounds of rejection are overcome and that the application has now been placed in full condition for allowance. Accordingly, the applicants earnestly solicit early and favorable action. Should there be any further questions or reservations, the Examiner is urged to telephone the applicants' undersigned attorney at (770) 984-2300.

Respectfully submitted,

John M. Harman
Reg. No. 38,173

GARDNER GROFF, P.C.
Paper Mill Village, Building 23
600 Village Trace, Suite 300
Marietta, GA 30067
Tel: 770/984-2300
Fax: 770/984-0098